

JOHN ELIAS BALDACCI GOVERNOR STATE OF MAINE Department of Transportation 16 State House Station Augusta, Maine 04333-0016

> DAVID A. COLE COMMISSIONER

May 13, 2010 Subject: **Bradley** Federal Project No: BH-1668(700)X State Pin No: 016687.00 **Amendment No. 3**

Dear Sir/Ms:

Make the following change to the bid document:

In the Bid Book, after page 76, **ADD** the attached "SPECIAL PROVISION, SECTION 504, Research Equipment Installation", 1 page dated May 12, 2010.

Consider this change and information prior to submitting your bid on May 19, 2010.

Sincerely,

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Scott Bickford Contracts & Specifications Engineer



SPECIAL PROVISION <u>SECTION 504</u> Research Equipment Installation

504.01 Description. The Perkins Bridge will be load tested and monitored by the Advanced Structures and Composites Center (AEWC) at the University of Maine. AEWC will install approximately 30 strain gages on three arches to be used for the bridge. Strain gages will be installed in the shop. This will require more conscience, delicate handling of the three instrumented arches. Deflection gages will also be placed on these same arches on a temporary structure under the bridge. The temporary structure will be constructed by AEWC. In addition, several soil pressure gages will be buried in the soil above these arches. The pressure gages will be located at several locations along the crown of the arch near the concrete deck. Bagged sand will be used for bedding of the gages and hand compacted. Contractor will need to place concrete decking around one or more PVC conduits placed through composite decking near bridge crown. Conduits will be installed by AEWC. The installation of these gages by AEWC will be concurrent with the backfilling of the bridge. This activity will be coordinated with the contractor. Equipment will be restricted to non-vibratory compactors for a distance 2 feet from the gage until there is at least 2-feet of cover over the gage.

Strain and deflection measurements will be recorded during filling with concrete and each subsequent loading of the bridge (decking, concrete deck, backfilling, headwall, etc.) During each step AEWC staff and/or students will be on-site to collect the data during construction. After construction is complete a load test will be conducted with a predetermined live load such as two loaded 58,000 gvw dump trucks. Dump Trucks shall be provided by Maine DOT.

The Contractor shall conduct a meeting with AEWC personnel and Resident prior to construction of the superstructure. The AEWC shall be given two weeks notice prior to any construction that will impact installation of research equipment. The AEWC shall have a minimum of two days to install their equipment. The Contractor shall provide access to the underside of the arches. Contractor shall provide a mutually agreed upon space near the location of the side of the bridge wing wall where an instrumentation box (approx. 3'x4'x2') can be mounted. The box will be temporarily located on a platform provided by AEWC until the wing wall is constructed, at which point it will be permanently mounted to the wing wall by AEWC. Contractor may have to work around conduit running from the underside of the bridge to the instrumentation box.

The contact at the AEWC is Edwin Nagy.

Edwin Nagy P.E. Research Scientist AEWC – Advanced Structures and Composites Center The University of Maine Orono, ME 04469-5793 Phone: (207) 581-2071 Fax: (207) 581-2074 www.aewc.umaine.edu

504.08 Basis of Payment This work shall be incidental to related contract items.